NAU
NORTHERN ARIZONA UNIVERSITY

Department of Mathematics and Statistics
Colloquium
Tuesday September 10
AMB 164 4:00 - 5:00 pm

Arrangements, hypergraphs, and polymatroids, GAGs, and other stories (sabbatical report)

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Abstract

Abstract: I will briefly summarize my activities and travel during my 2018-19 sabbatical, and then focus on three results, to the extent possible: a classification of Orlik-Solomon algebras of graphs, using a generalization of Whitney's 2-isomorphism theorem to hypergraphs (due to Whittle and Vertigan), a theorem and conjecture about embedding graphic arrangement groups (GAGs) into products of pure braid groups, and a notion of graphic braid group that seems to produce interesting groups.